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EXAMINER				
MOON, SEOKYUN				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,161

Applicant(s)

GRANT ET AL.

Examiner

SEOKYUN MOON

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 19-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 19-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The Applicant's arguments with respect to the references cited in the previous Office action have been considered but are moot in view of the new ground(s) of rejection.

The Applicant's arguments with respect to the rejections under 35 U.S.C. 101 and the newly amended claims 10-16 have been fully considered but they are not persuasive.

The newly amended claims 10-16 disclose, "*computer-readable storage medium*". And the specification of the instant Application discloses [pg 11 lines 17-27],

*"Such media include, for example, **computer readable media**, which **stores program code** that, when executed by a processor, cause the processor to perform the steps described herein. Embodiments of **computer-readable media include**, but are not limited to, an electronic, optical, magnetic, or other storage or **transmission device** capable of providing a processor, such as the processor in a web server, with computer-readable instructions. Other examples of suitable media include, but are not limited to, a floppy disk, CD-ROM, magnetic disk, memory chip, ROM, RAM, ASIC, configured processor, all optical media, all magnetic tape or other magnetic media, or any other medium from which a computer processor can read. Also, **various other forms of***

computer-readable media may transmit or carry instructions to a computer, including a router, private or public network, or other transmission device or channel."

Since the specification discloses the "*computer-readable media*" as a means for storing and suggests a transmission device or a channel, which is a non statutory subject matter, as the "*computer-readable media*", the amended claims would not overcome the rejections of claims 10-16 under 35 U.S.C. 101 disclosed in the previous Office action.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 10-16** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 10-16 disclose, "*computer-readable storage medium*". The specification discloses a computer-readable medium and suggests a transmission device or a channel, which is a non statutory subject matter, as the "*computer-readable media*",

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claim 14** recites the limitation "*the handheld communication device*" in line 3. There is insufficient antecedent basis for this limitation in the claim.

For further examination purpose, the claim limitation will be interpreted as, "*the communication device*", as disclosed in claim 13 on which claim 14 depends.

Appropriate correction or explanation is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 1-3, 10-11, 13-16, 19-20, 22, 24-25, 27, 28, and 30** are rejected under 35 U.S.C. 102(b) as being anticipated by Wies (US 6,125,385).

As to **claim 1**, Wies teaches a method, comprising:

receiving an input signal associated with a virtual touch (retrieving and receiving "*effect information*" at a processing means in the computer) [col. 43 lines 11-18] at a communication device ("*client machines 14*" and "*16*") [fig. 1], the communication device including a user-interface member [fig. 4a] and an actuator [col. 9 lines 27-33];

outputting a request at the communication device (outputting and displaying force web page objects on the display) [fig. 12 and col. 43 lines 7-10], the request relating to a contact with the user-interface member to receive the virtual touch (the force web page objects are related to a contact with the mouse to receive force feedback); and

providing a control signal to the actuator in response to the contact with the user-interface member, the control signal configured to cause the actuator to output a haptic effect associated with the virtual touch at the user-interface member [col. 43 lines 24-30].

As to **claim 2**, Wies teaches the method comprising extracting a haptic code from the input signal, the control signal being based at least in part on the haptic code (Note that, in the device of Wies, the "*effect information*" defines "*generic force effects*" causing a "*force signal*" to be outputted) [col. 43 lines 12-30].

As to **claim 3**, Wies teaches that the user-interface member includes one of a key, a button, a key pad, a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob [col. 9 lines 5-15].

As to **claim 10**, Wies teaches a computer-readable storage medium (the memories in the "*client machines 14*" and "*16*") [fig. 1] containing executable instructions which cause a data processing system to perform a method, the method comprising:

receiving an input signal associated with a virtual touch (retrieving and receiving "*effect information*" at a processing means in the computer) [col. 43 lines 11-18] at a communication device ("*client machines 14*" and "*16*") [fig. 1], the communication device including a user-interface member [fig. 4a] and an actuator [col. 9 lines 27-33];

outputting a request at the communication device (outputting and displaying force web page objects on the display) [fig. 12 and col. 43 lines 7-10], the request relating to a contact with the user-interface member to receive the virtual touch (the force web page objects are related to a contact with the mouse to receive force feedback); and

providing a control signal to the actuator in response to the contact with the user-interface member, the control signal configured to cause the actuator to output a haptic effect associated with the virtual touch at the user-interface member [col. 43 lines 24-30].

As to **claim 11**, all of the claim limitations have already been discussed with respect to the rejection of claim 2.

As to **claim 13**, Wies teaches a computer-readable storage medium (the memories in the "*client machines 14*" and "*16*") [fig. 1] containing executable instructions which cause a data processing system to perform a method, the method comprising:

receiving a virtual touch indicator (receiving signals corresponding to "*force web page objects*") [fig. 12 and col. 43 lines 7-10] and a virtual touch signal (retrieving and receiving "*effect information*" at a processing means in the computer) [col. 43 lines 11-18];

performing an initialization responsive to the virtual touch indicator on a communication device (outputting and displaying force web page objects on the display) [fig. 12 and col. 43 lines 7-10]; and

outputting a control signal associated with the virtual touch signal to an actuator after performing the initialization [col. 43 lines 24-30].

As to **claim 14**, all of the claim limitations have already been discussed with respect to the rejection of claim 6.

As to **claim 15**, all of the claim limitations have already been discussed with respect to the rejection of claim 7.

As to **claim 16**, all of the claim limitations have already been discussed with respect to the rejection of claim 8.

As to **claim 19**, Wies teaches an apparatus, comprising:

a user-interface member coupled to a body (the body of the elements shown on fig. 4);

a processor (the processing means included in the "*client machines 14*" and "*16*") [fig. 1];

an actuator coupled to the body and in communication with the processor [col. 43 lines 25-30]; and

a memory (the memory in the "*client machines 14*" and "*16*") [fig. 1] in communication with the processor, the memory storing instructions executable by the processor, including:

instructions for receiving an input signal associated with a virtual touch (retrieving and receiving "*effect information*" at a processing means in the computer) [col. 43 lines 11-18] at the apparatus ("*client machines 14*" and "*16*") [fig. 1];

instructions for outputting a request (outputting and displaying force web page objects on the display) [fig. 12 and col. 43 lines 7-10] relating to a contact with the user-interface member to receive the virtual touch (the force web page objects are related to a contact with the mouse to receive force feedback); and

instructions for providing a control signal associated with the contact to the actuator, the control signal configured to cause the actuator to output a haptic effect associated with the virtual touch at the user-interface member [col. 43 lines 24-30].

As to **claim 20**, Wies teaches that the body is included in a handheld communication device [fig. 4].

As to **claim 22**, Wies teaches that the user-interface member includes one of a key, a button, a key pad, a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob [col. 9 lines 5-15].

As to **claim 24**, Wies teaches an apparatus, comprising:

a user-interface member (the user manipulable member of the device shown on fig. 4);

a processor (the processing means included in the "*client machines 14*" and "*16*") [fig. 1];

an actuator coupled to the user-interface member and in communication with the processor [col. 43 lines 25-30]; and

a memory (the memory in the "*client machines 14*" and "*16*") [fig. 1] in communication with the processor, the memory storing instructions executable by the processor, including:

instructions for receiving a virtual touch indicator (receiving signals corresponding to "*force web page objects*") [fig. 12 and col. 43 lines 7-10] and a virtual touch signal (retrieving and receiving "*effect information*" at a processing means in the computer) [col. 43 lines 11-18];

instructions for performing an initialization responsive to the virtual touch indicator (outputting and displaying force web page objects on the display) [fig. 12 and col. 43 lines 7-10];

instructions for outputting a control signal associated with the virtual touch signal to an actuator after performing the initialization [col. 43 lines 24-30].

As to **claim 25**, Wies teaches that the user-interface member is coupled to a handheld communication device [fig. 4].

As to **claim 27**, Wies teaches that the user-interface member includes one of a key, a button, a key pad, a direction pad, a touch screen, a scroll wheel, a mini-joystick, a trackball, and a knob [col. 9 lines 5-15].

As to **claim 28**, Wies teaches that the virtual touch signal is associated with a manipulation of a remote user-interface member (the "*effect information*" is associated with the manipulation of the user-interface member) [col. 43 lines 11-30].

As to **claim 30**, Wies teaches that the virtual touch indicator is one or more of haptic code or a message [col. 43 lines 11-18].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 4-9, 12, 21, 23, 26, and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wies.

As to **claim 4**, Wies teaches that the virtual touch is associated with one of an engine idling, a tennis racquet, a slippery ice [fig, 12].

Wies does not teach that the virtual touch is associated with one of a handshake, a high-five, a pat on the back, a pulse sensation, a heartbeat sensation, and a pet purring sensation.

However, since the Applicant has failed to disclose that specifying the virtual touch being associated with a specific one of a handshake, a high-five, a pat on the back, a pulse sensation, a heartbeat sensation, and a pet purring sensation provides an advantage, is used for a particular purpose, or solves a stated problem, it would be an obvious matter of design choice to use any one of a handshake, a high-five, a pat on the back, a pulse sensation, a heartbeat sensation, and a pet purring sensation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to associate any haptic sensation to the virtual touch, including any of the claimed haptic feedbacks, since any choice of feedback would provide the predictable result of delivering haptic feedback to the device user.

As to **claim 5**, Wies teaches a method, comprising:

receiving a virtual touch indicator (receiving signals corresponding to "*force web page objects*") [fig. 12 and col. 43 lines 7-10] and a virtual touch signal (retrieving and receiving "*effect information*" at a processing means in the computer) [col. 43 lines 11-18] at a communication device ("*client machines 14*" and "*16*") [fig. 1];

performing an initialization responsive to the virtual touch indicator on a communication device (outputting and displaying force web page objects on the display) [fig. 12 and col. 43 lines 7-10]; and

outputting a control signal associated with the virtual touch signal to an actuator coupled to the communication device after performing the initialization [col. 43 lines 24-30].

Wies teaches the communication device being a desktop computer ("*personal computer system 48*") [fig. 4a].

Wies does not expressly teach the communication device being a handheld communication device.

However, Examiner takes Official Notice that it is well known in the art to use a PDA or a mini laptop as a communication device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a PDA or a mini laptop as a communication device in Wies instead of using a desktop computer as the communication device, in order to provide a portable communication device.

As to **claim 6**, Wies as modified above teaches that the actuator is configured to output a haptic effect to a user-interface member coupled to the handheld communication device [Wies: col. 43 lines 25-30].

As to **claim 7**, all of the claim limitations have already been discussed with respect to the rejection of claim 3.

As to **claim 8**, Wies teaches that the initialization includes outputting a request relating to a contact with the user-interface member (the force web page objects are related to a contact with the mouse to receive force feedback) [fig. 12 and col. 43 lines 7-10].

As to **claim 9**, Wies teaches that the virtual touch signal is associated with a manipulation of a remote user-interface member (the "*effect information*" is associated with the manipulation of the user-interface member) [col. 43 lines 11-30].

As to **claim 12**, all of the claim limitations have already been discussed with respect to the rejection of claim 4.

As to **claim 21**, Wies teaches that the handheld communication device is a joystick [col. 9 lines 5-15].

Wies does not expressly teach that the handheld communication device includes at least one of a cellular phone, a satellite phone, a cordless phone, a personal digital assistant, a pager, a two-way radio, a portable computer, a game console controller, a personal gaming device, and an MP3 player.

However, Examiner takes Official Notice that it is well known in the art to use a joystick as a controller for a game console.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Wies' joystick as a controller for a game console, in order to provide a game console controller providing a haptic feedback.

As to **claim 23**, all of the claim limitations have already been discussed with respect to the rejection of claim 4.

As to **claim 26**, all of the claim limitations have already been discussed with respect to the rejection of claim 21.

As to **claim 29**, Wies teaches that the virtual touch indicator is one or more of haptic code or a message [col. 43 lines 11-18].

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEOKYUN MOON whose telephone number is (571)272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 19, 2009
/S. M./
Examiner, Art Unit 2629

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629